#### CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

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B074 Brant Branta bernicla

Family: Anatidae Order: Anseriformes Class: Aves

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### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The brant is a locally common winter resident (October or November to May) along the California coast. It is found in large, shallow estuaries with eelgrass beds, primarily in Humboldt, Tomales, Morro, and San Diego bays, San Diego River mouth, and Drake's Estero, and also in nearby marine waters. Fewer are found on smaller estuaries with sandy or muddy bottoms. Stragglers remain through July. Southbound migration in fall usually is well offshore, but during northbound migration (late February to April) large numbers can be seen from coastal promontories; the relatively few stops usually are on estuarine waters. According to U. S. Fish and Wildlife Service (1979), the mid-winter population in California has declined from nearly 40,000 in the 1950's to a small remnant, although large numbers still winter in Mexico, and a few thousand in Oregon and Washington (Cogswell 1977, Pacific Waterfowl Flyway Council 1978, McCaskie et al. 1979, Garrett and Dunn 1981).

### SPECIFIC HABITAT REQUIREMENTS

Feeding: By far the most important food of wintering brant is eelgrass, largely the leaves, with some rhizomes. Formerly, ate large numbers of herring eggs attached to eelgrass. Algae (especially sea lettuce), other aquatic plants, and upland sedges and grasses also are eaten in winter, especially when eelgrass is not available. At Salton Sea, eats bulrush. Feeds by tipping in shallow water, grazing on plants exposed at low tide or, rarely, grazing ashore. During breeding season, grazes on grasses, pondweed, and other plants. Young presumably eat insects and aquatic invertebrates (Palmer 1976).

Cover: Rests on open water of estuaries, often in large flocks. When disturbed, flocks sometimes retreat to open ocean beyond the surf, or to remote sandbars or beaches (Cogswell 1977).

Reproduction: Nests on arctic coastal tundra, usually by lakes or on islands, but also along river valleys, or on uplands with low herbaceous cover (Einarsen 1965, Harrison 1978).

Water: Capable of drinking salt water, due to a well-developed salt gland (Summers and Smith 1990, as cited in Reed et al. 1998).

Pattern: Most important staging areas are found in shallow, marine waters along indented shorelines, within lagoons, or behind barrier beaches. They are characterized by the presence of tidal or subtidal eelgrass meadows (Reed et al. 1998).

### SPECIES LIFE HISTORY

Activity Patterns: Yearlong, mostly diurnal activity. Tends to feed when tide is out and

eelgrass and sea lettuce accessible. Migration is nocturnal as well as diurnal (Johnsgard 1975b).

Seasonal Movements/Migration: Brant wintering in Mexico and California migrate along California coast to and from breeding grounds in Alaska and northern Canada; most are absent from California June to September.

Home Range: Pairs tend to remain a short distance (<800m) from nest (Reed et al. 1998).

Territory: Breeding territory, used for displays, nesting, and feeding, is not well-established until just before egg-laying. In good habitat, the average distance between 66 nests was 33.8 m (111 ft) (Palmer 1976).

Reproduction: Does not breed in California. Begins breeding in late May to mid-June. Monogamous, colonial nester. Clutch size usually 3-5, range 2-8; single brooded and usually incubates for 23-24 days, range 22-26. Precocial young are tended by both parents, and remain with them until the following spring. Some breed at 2 yr, but most not until 3 yr (Palmer 1976, Harrison 1978).

Niche: Many nests are destroyed by arctic foxes; major avian predators on eggs are gulls and jaegers, especially parasitic jaegers (Johnsgard 1975b). Adults are killed by hunters. On winter range, readily disturbed by boaters. U. S. Fish and Wildlife Service (1979) attributed the population decline in California to harassment by humans on the favored estuaries.

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